Title: MEDIA PRODUCTION SYSTEM USING TIME ALIGNMENT TO SCRIPTS
Inventors: Robert BOMAN, et al.
Atty. Ref.: 9432-000270

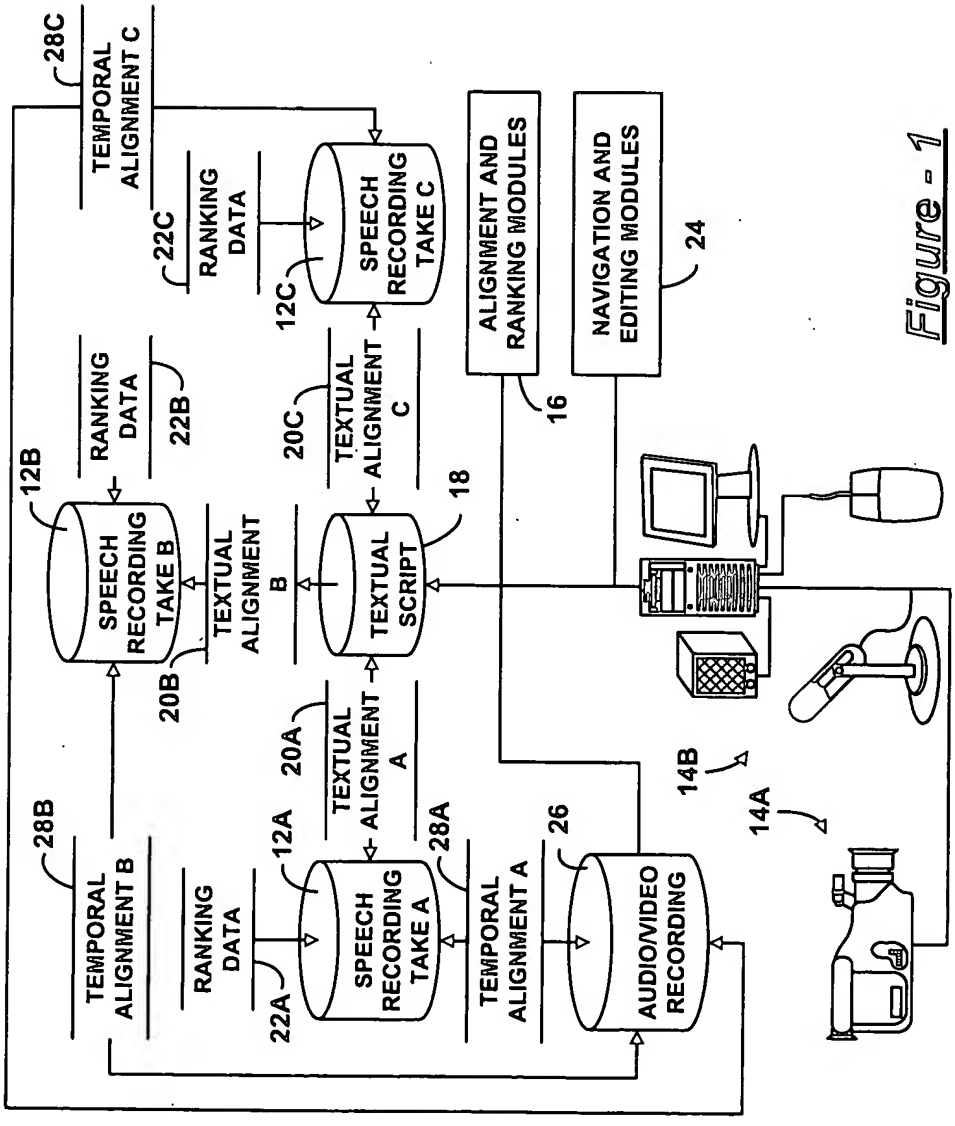

Figure - 1

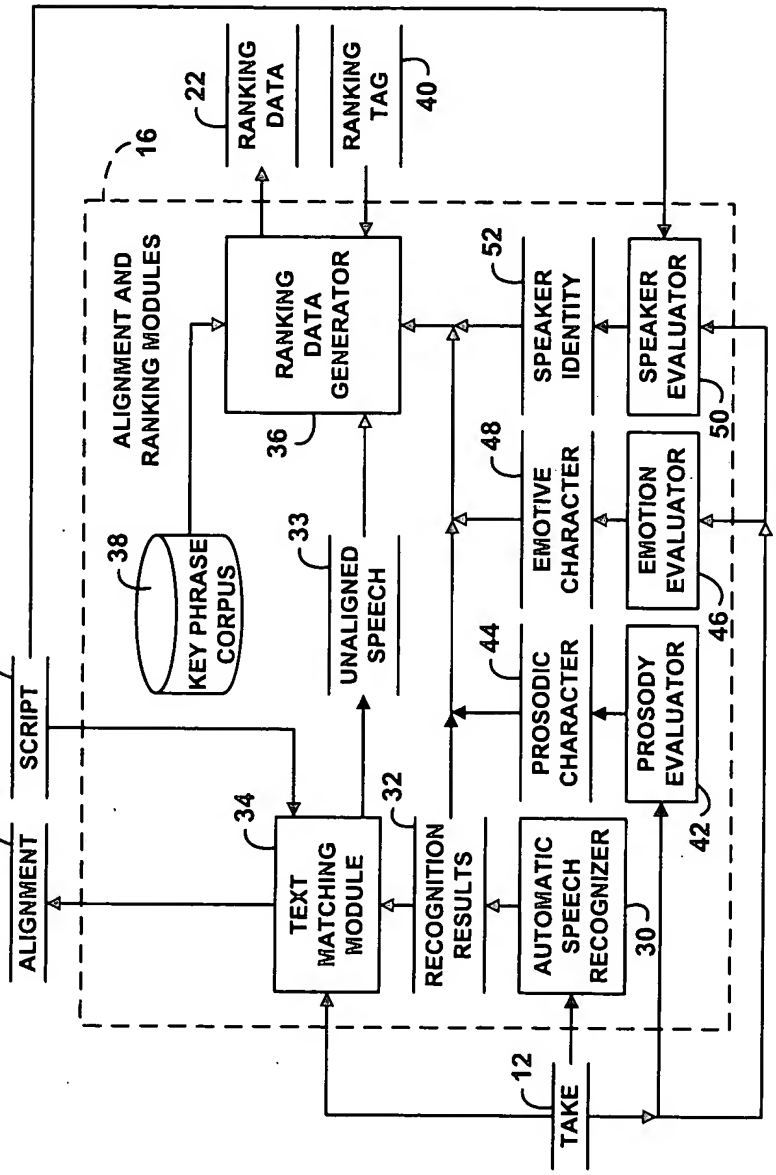
ALIGNMENT AND RANKING MODULES
16
RANKING DATA
22
RANKING TAG
40
RANKING DATA GENERATOR
36
SPEAKER IDENTITY
52
SPEAKER EVALUATOR
50
EMOTIVE CHARACTER
48
EMOTION EVALUATOR
46
PROSODIC CHARACTER
44
PROSODY EVALUATOR
42
KEY PHRASE CORPUS
38
UNALIGNED SPEECH
33
SCRIPT
18
ALIGNMENT
20
TEXT MATCHING MODULE
34
RECOGNITION RESULTS
32
AUTOMATIC SPEECH RECOGNIZER
30
TAKE
12

Figure - 2

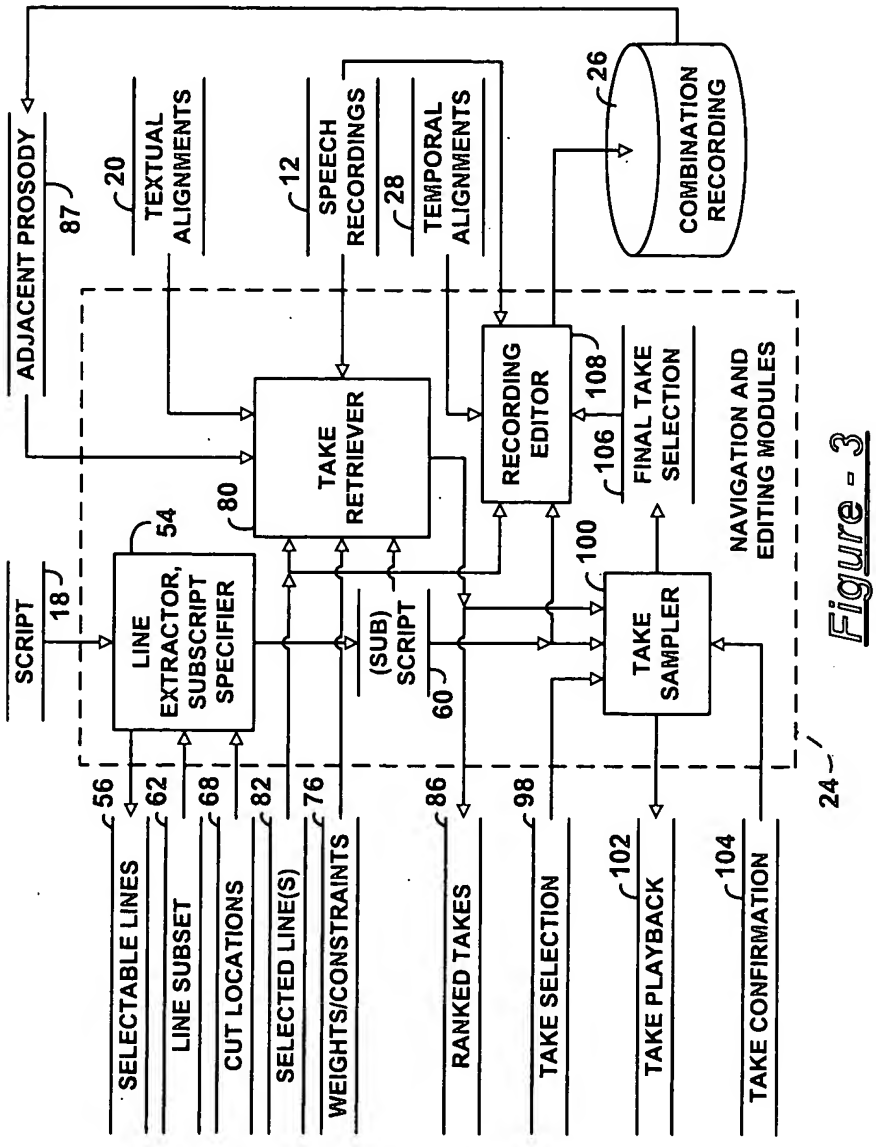
ADJACENT PROSODY
87
20
TEXTUAL ALIGNMENTS
12
SPEECH RECORDINGS
28
TEMPORAL ALIGNMENTS
26
COMBINATION RECORDING
SCRIPT
18
LINE EXTRACTOR, SUBSCRIPT SPECIFIER
54
80
TAKE RETRIEVER
RECORDING EDITOR
108
106
FINAL TAKE SELECTION
NAVIGATION AND EDITING MODULES
(SUB) SCRIPT
60
100
TAKE SAMPLER
24
56
SELECTABLE LINES
62
LINE SUBSET
68
CUT LOCATIONS
82
SELECTED LINE(S)
76
WEIGHTS/CONSTRAINTS
86
RANKED TAKES
98
TAKE SELECTION
102
TAKE PLAYBACK
104
TAKE CONFIRMATION

Figure - 3

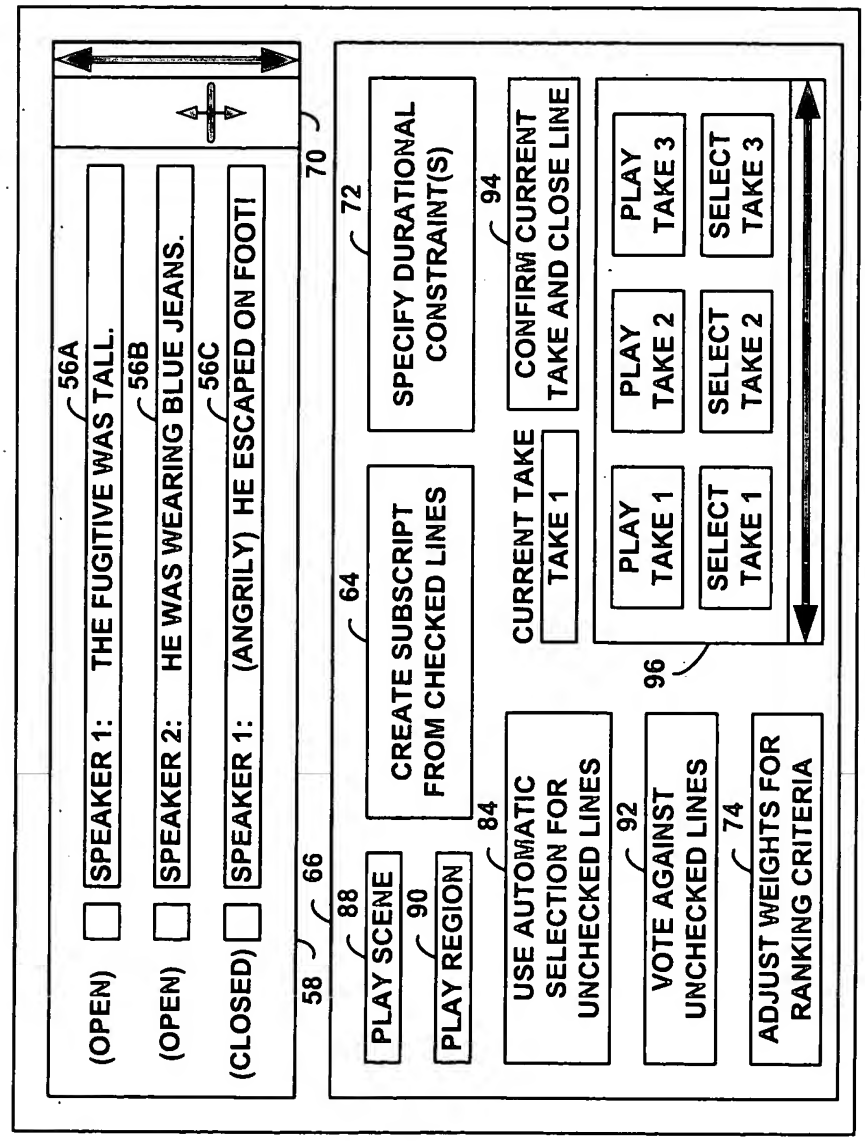
(OPEN)
SPEAKER 1: THE FUGITIVE WAS TALL.
56A
(OPEN)
SPEAKER 2: HE WAS WEARING BLUE JEANS.
56B
(CLOSED)
SPEAKER 1: (ANGRILY) HE ESCAPED ON FOOT!
56C
58
66
70
72
64
88
PLAY SCENE
90
PLAY REGION
CREATE SUBSCRIPT FROM CHECKED LINES
84
SPECIFY DURATIONAL CONSTRAINT(S)
94
CONFIRM CURRENT TAKE AND CLOSE LINE
CURRENT TAKE
TAKE 1
USE AUTOMATIC SELECTION FOR UNCHECKED LINES
92
VOTE AGAINST UNCHECKED LINES
74
ADJUST WEIGHTS FOR RANKING CRITERIA
96
PLAY TAKE 1
SELECT TAKE 1
PLAY TAKE 2
SELECT TAKE 2
PLAY TAKE 3
SELECT TAKE 3

Figure - 4

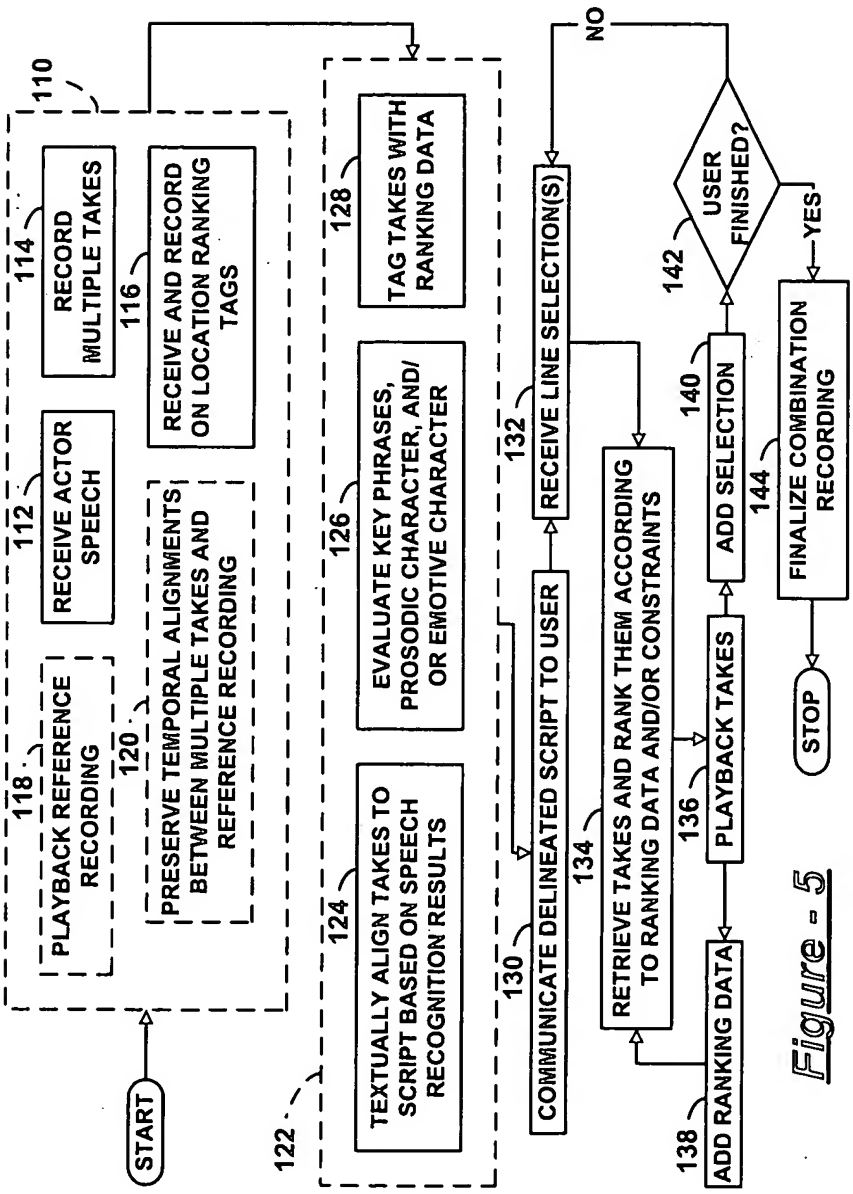
START
110
PLAYBACK REFERENCE RECORDING
118
RECEIVE ACTOR SPEECH
112
RECORD MULTIPLE TAKES
114
PRESERVE TEMPORAL ALIGNMENTS BETWEEN MULTIPLE TAKES AND REFERENCE RECORDING
120
RECEIVE AND RECORD ON LOCATION RANKING TAGS
116
122
TEXTUALLY ALIGN TAKES TO SCRIPT BASED ON SPEECH RECOGNITION RESULTS
124
EVALUATE KEY PHRASES, PROSODIC CHARACTER, AND/OR EMOTIVE CHARACTER
126
TAG TAKES WITH RANKING DATA
128
COMMUNICATE DELINEATED SCRIPT TO USER
130
RECEIVE LINE SELECTION(S)
132
RETRIEVE TAKES AND RANK THEM ACCORDING TO RANKING DATA AND/OR CONSTRAINTS
134
PLAYBACK TAKES
136
ADD SELECTION
140
ADD RANKING DATA
138
USER FINISHED?
142
NO
YES
FINALIZE COMBINATION RECORDING
144
STOP

Figure - 5